USPTO PATENT FULL-TEXT AND IMAGE DATABASE



(41 of 44)

United States Patent

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Heath, Jr., et al.

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Substrates for HIV protease

Abstract

An assay method for the rapid determination of hydrolytic enzyme activity in large numbers of samples is provided which comprises bonding a resin-binding compound, such as biotin, to one side of the scissile bond of the substrate and a *reporter molecule*, such as a fluorescence marker, to the opposite side of the scissile bond, incubating the modified substrate and the enzyme in multiple well plates, e.g. 96-well plates, optionally in the presence if a test inhibitor or activator compound transferring the incubation solutions to a second multiple well plate having upper and lower chambers separated by a porous membrane the upper chamber of which contains resin beads capable of binding with the resinbinding compound, filtering and washing the wells of the second plate and reading the emission from the plates. The invention also provides protease substrates for HIV-1 protease, vertebrate stromelysin and derivatives thereof which are useful in the assay method.

Inventors: Heath, Jr.; William F. (Indianapolis, IN); Lai; Mei-Huei T. (Carmel, IN); Manetta;

Joseph V. (Indianapolis, IN); Sportsman; John R. (Indianapolis, IN); Yan; Sau-Chi B.

(Indianapolis, IN)

Assignee: Eli Lilly and Company (Indianapolis, IN)

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